

New York State Department of Transportation

Yellow Flag NB2258W005

By: Alex Abreu

Flag Date: July 05, 2022

Superseding Information:

No Flags Superseded

Structure Information

BIN: 1065318

Feature Carried: 278I278IX2M23027

Feature Crossed: 6TH AVENUE

Orientation: 8 - NORTHWEST

Region: 11 - NEW YORK CITY

County: KINGS

Political Unit: City of NEW YORK

Approximate Year Built: 1962

Posted Load Matches Inventory : Yes

Bridge Load Posting (Tons) : Not Posted for Load

Primary Owner: New York State Department of Transportation

Primary Maintenance Responsibility: 12 - State - Subcontracted to another Party

Typical or Main Span Type: 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp

Number of Spans: 322

Verbal Notification Information

Person Notified: Heinz Joachim, P.E.

Date: July 05, 2022 2:00:00 PM

Of: NYSDOT Region 11

Signature Information

Signature: Alex Abreu, P.E. 099761-1

Date: July 19, 2022

Reviewed By: Robert Kemp

Date: July 20, 2022

Attachments: 6

Flagged Elements

Parent Element	Element	Total Quantity	Unit
Span Number : 197			
	107 - Steel Open Girder/Beam	989	ft
	PR831 - Steel Beam End	42	each

Flagged Condition Description

This Yellow Flag No. NB2258W005 is NEW.

Location: Span 197, Girder G3 at Pier 197 over 3rd Avenue Westbound.

Description: The end of Girder G3 in Span 197 at Pier 197 exhibits a 2" long diagonal crack in the upper web stemming from the top cope at the right face of the girder (Photo 5).

The full height of the girder web along the connection angles exhibits section loss for 1/16" deep for 3" wide at the left face and 1/8" deep for 2" wide at the right face (Photos 4 and 6). The total overall shear web area section loss is approximately 30% for the full height of the girder web. The connection angles at both faces of the girder exhibit no significant defects. Refer to the Yellow Flag Condition Sketch (Photo 2) for more details.

This is a newly flagged condition.

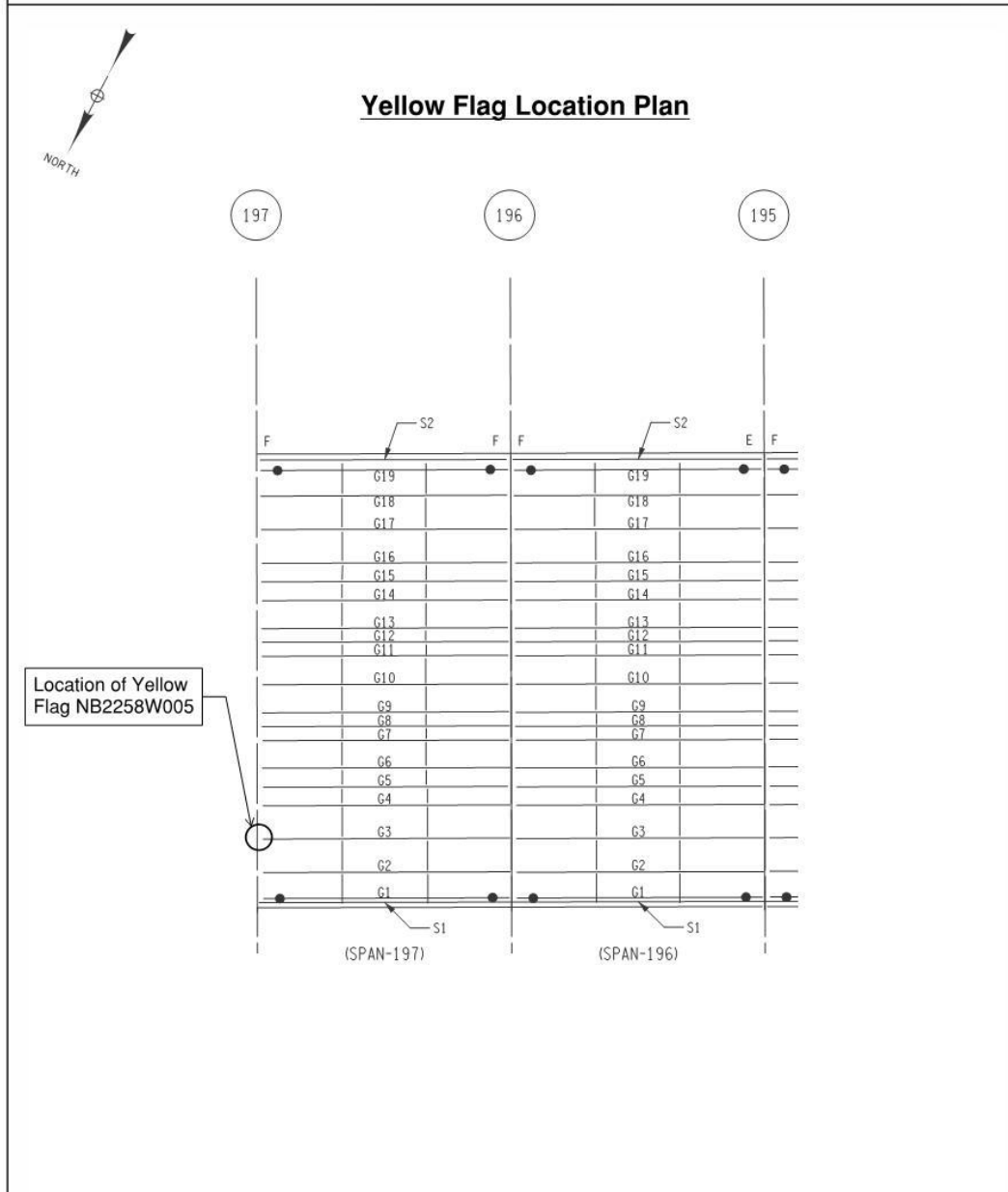
Notes:

1. Adjacent Girders G2 and G4 both have previous repair plates in the girder webs and are in good condition. The girder spacing is approximately 7ft centerline to centerline for Girders G2 thru G4.
2. A double left lane closure on 3rd Ave Out-Bound (Verrazzano Bridge), between 32nd and 33rd Streets and a 35' bucket truck are required to access this location.

Flag Photographs

Photo Number: **1**Photo Filename: **22_Flag Location Plan.jpg**

Gowanus Expressway
2022 Biennial Inspection - Field Sketch

BIN: 1065318Team: AA/TSDate: 07/05/2022Span: 197Location: Girder G3 at Pier 197

Attachment Description: Yellow Flag Location Plan

Photo Number: 2

Photo Filename: 22_Span 197_Pier 197_Girder G3_Connection Detail.

Gowanus Expressway
2022 Biennial Inspection - Field Sketch

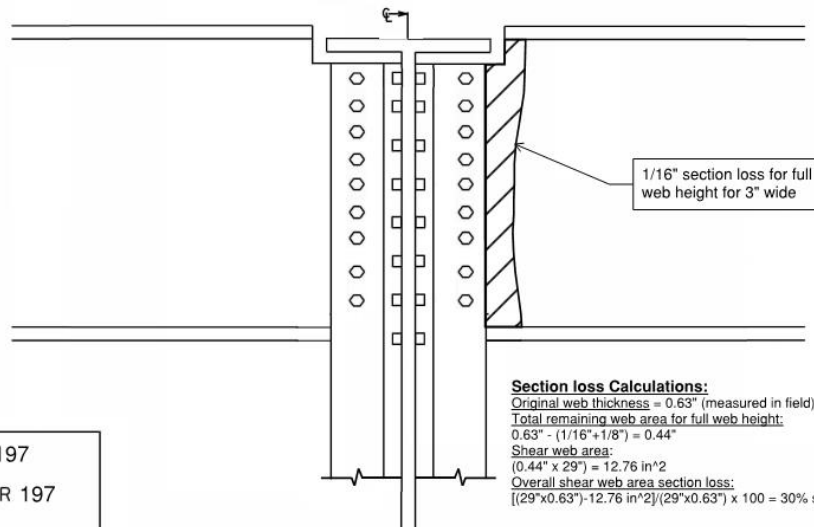
BIN: 1065318

Team: AA/TS

Date: 7/5/2022

Span: 197

Location: Girder G3 at Pier 197

Left Face of Girder G3

SPAN 197
@ PIER 197
G3

Section loss Calculations:

Original web thickness = 0.63" (measured in field)

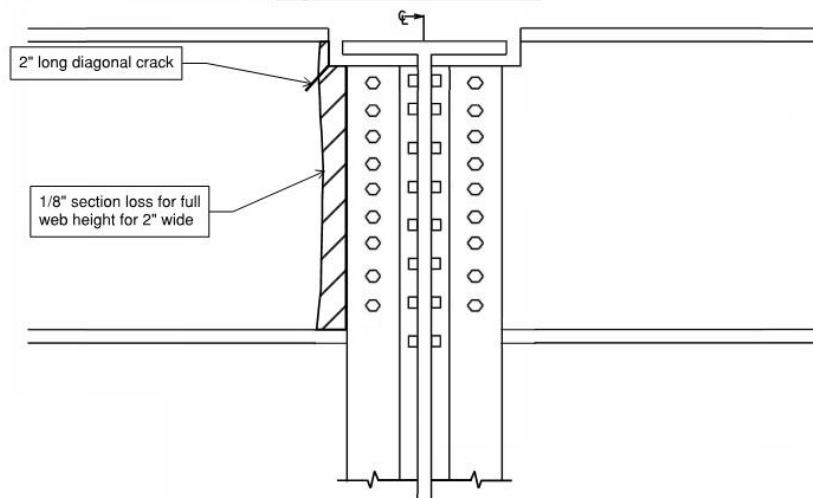
Total remaining web area for full web height:

 $0.63" - (1/16" + 1/8") = 0.44"$

Shear web area:

 $(0.44" \times 29") = 12.76 \text{ in}^2$

Overall shear web area section loss:

 $[(29" \times 0.63") - 12.76 \text{ in}^2] / (29" \times 0.63") \times 100 = 30\% \text{ section loss}$ **Right Face of Girder G3**

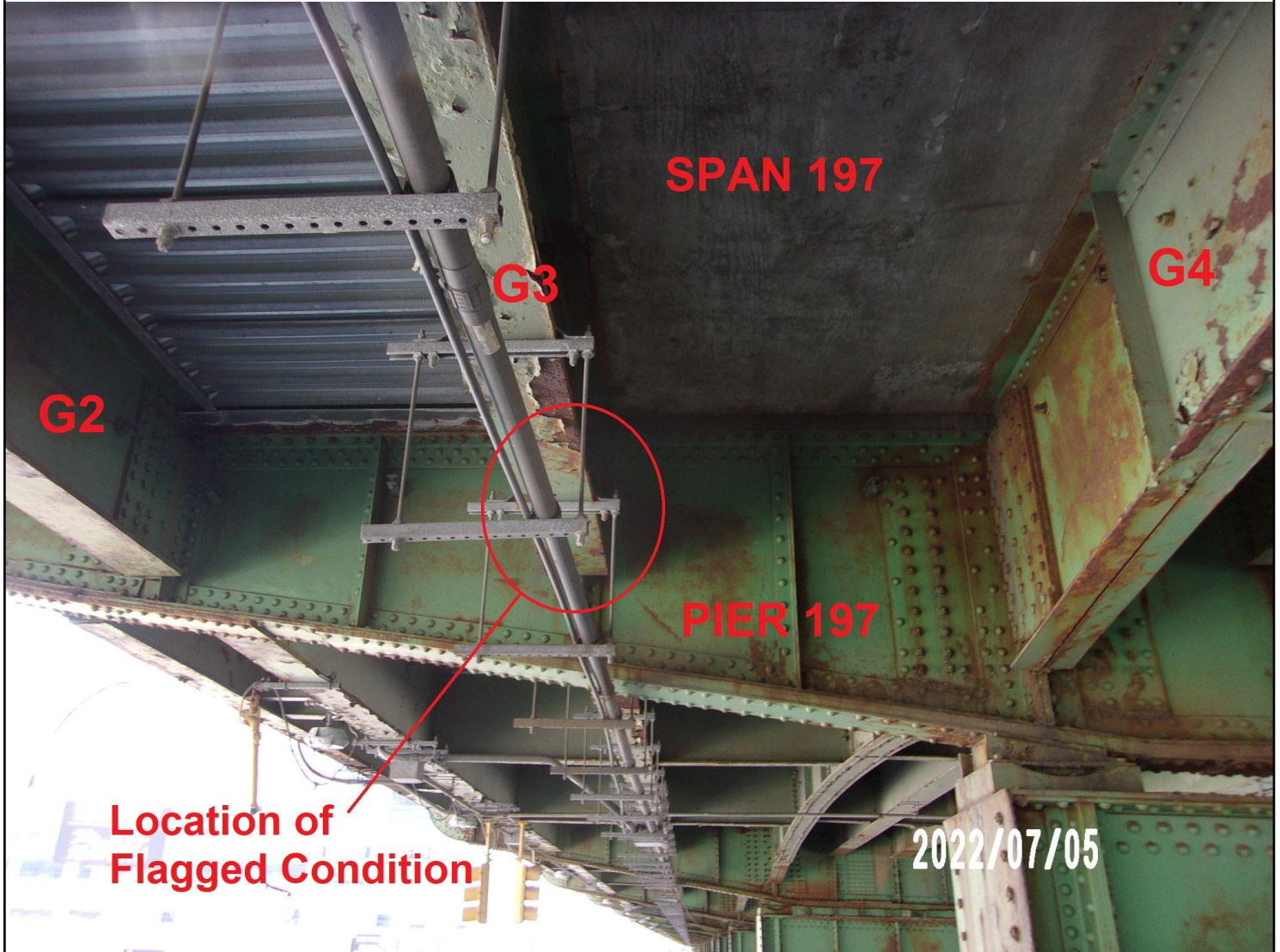
SCALE: N.T.S

wsp

Attachment Description: Yellow Flag Condition Sketch

Photo Number: 3

Photo Filename: 22_113_1262.JPG



Attachment Description: General view of the flagged condition at Girder G3 in Span 197 at Pier 197. Looking End.

Photo Number: 4

Photo Filename: 22_113_1263.JPG



Attachment Description: The right face of Girder G3 in Span 197 at Pier 197. The full height of the web exhibits 1/8" section loss for 2" wide along the connection angle. Looking Left.

Photo Number: 5

Photo Filename: 22_113_1270.JPG



Attachment Description: The right face of Girder G3 in Span 197 at Pier 197. The upper web of the girder exhibits a 2" long diagonal crack stemming from the top cope. Looking Left.

Photo Number: 6

Photo Filename: 22_113_1271.JPG



Attachment Description: The left face of Girder G3 in Span 197 at Pier 197. The full height of the web exhibits 1/16" section loss for 3" wide along the connection angle. Looking Right.